| | Current XRef | Retrieval Classif | Inventor | S | С | P | 2 | 3 | 4 | 5 |
|----|-----------------|----------------------|-----------------------|---|---|---|---|---|---|---|
| 44 | | | WOZNEY, JOHN M et al. | Ø | | | | | | |
| 45 | | | HE, WEI WU et al. | Ø | | | | | | |

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| | | Image Doc. Displayed | | | | | | | |
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| 4 4 | WO | 9507982 | A1 | | | | | | |
| 45 | WO | 9611259 | A1 | | | | | | |

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This file contains CAS Registry Numbers for easy and accurate substance identification.

- => s (Mathews, L.? or Mathews L.?)/au
 - 44 MATHEWS, L.?/AU
 - 44 MATHEWS L.?/AU
- L1 44 (MATHEWS, L.? OR MATHEWS L.?)/AU
- => s (Vale, W.? or Vale W.?)/au
 - 215 VALE, W.?/AU
 - 215 VALE W.?/AU
- L2 215 (VALE, W.? OR VALE W.?)/AU
- => s (Tsuchida, K.? or Tsuchida K.?)/au
 - O TSUCHIDA, K.?/AU
 - 0 TSUCHIDA K.?/AU
- L3 0 (TSUCHIDA, K.? OR TSUCHIDA K.?)/AU
- => s L1 and L2
- L4 9 L1 AND L2
- => d L4 1-9
- L4 ANSWER 1 OF 9 MEDLINE
- AN 96069914 MEDLINE
- DN 96069914 PubMed ID: 7589799
- TI Activin and its receptors during gastrulation and the later phases of mesoderm development in the chick embryo.
- AU Stern C D; Yu R T; Kakizuka A; Kintner C R; Mathews L S; Vale W W; Evans R M; Umesono K
- CS Department of Genetics and Development, College of Physicians and Surgeons of Columbia University, New York, New York 10032, USA.
- SO DEVELOPMENTAL BIOLOGY, (1995 Nov) 172 (1) 192-205. Journal code: 0372762. ISSN: 0012-1606.
- CY United States
- DT Journal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- OS GENBANK-U31222; GENBANK-U31223
- EM 199512
- ED Entered STN: 19960124

Last Updated on STN: 19960124 Entered Medline: 19951226

L4 ANSWER 2 OF 9 MEDLINE

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ΑN
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ΤI
     Molecular and functional characterization of activin receptors.
ΑU
     Mathews L S; Vale W W
CS
     Clayton Foundation Laboratories for Peptide Biology, Salk Institute, La
     Jolla, CA 92037.
SO
     RECEPTOR, (1993 Fall) 3 (3) 173-81. Ref: 23
     Journal code: 9109671. ISSN: 1052-8040.
     United States
CY
DT
     Journal; Article; (JOURNAL ARTICLE)
     General Review; (REVIEW)
      (REVIEW, TUTORIAL)
LA
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FS
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     199406
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     ANSWER 3 OF 9
L4
                        MEDLINE
ΑN
     94130828
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DN
     94130828
                 PubMed ID: 8299574
ΤI
     Hybridization histochemical localization of activin receptor subtypes in
     rat brain, pituitary, ovary, and testis.
     Cameron V A; Nishimura E; Mathews L S; Lewis K A; Sawchenko P E;
ΑU
     Vale W W
CS
     Clayton Foundation Laboratories for Peptide Biology, La Jolla, California
     92037.
NC
     DK-26741 (NIDDK)
     HD-13527 (NICHD)
     HL-35137 (NHLBI)
     ENDOCRINOLOGY, (1994 Feb) 134 (2) 799-808. 
Journal code: 0375040. ISSN: 0013-7227.
SO
CY
     United States
DT
     Journal; Article; (JOURNAL ARTICLE)
LA
     English
FS
     Abridged Index Medicus Journals; Priority Journals
EΜ
     199403
ED
     Entered STN: 19940318
     Last Updated on STN: 19940318
     Entered Medline: 19940308
L4
     ANSWER 4 OF 9
                        MEDLINE
AN
     94068580
                  MEDLINE
DN
     94068580
                PubMed ID: 8248234
TΙ
     Cloning and characterization of a transmembrane serine kinase that acts as
     an activin type I receptor.
ΑU
     Tsuchida K; Mathews L S; Vale W W
CS
     Clayton Foundation Laboratories for Peptide Biology, Salk Institute for
     Biological Studies, La Jolla, CA 92037-1099.
NC
     DK26741 (NIDDK)
     HD13527 (NICHD)
SO
     PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF
     AMERICA, (1993 Dec 1) 90 (23) 11242-6.
     Journal code: 7505876. ISSN: 0027-8424.
CY
     United States
DT
     Journal; Article; (JOURNAL ARTICLE)
LA
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FS
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OS
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     199401
ED
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Last Updated on STN: 19940201 Entered Medline: 19940104 ANSWER 5 OF 9 MEDLINE 93366823 MEDLINE 93366823 PubMed ID: 8395525 Characterization of type II activin receptors. Binding, processing, and phosphorylation. Mathews L S; Vale W W Clayton Foundation Laboratories for Peptide Biology, Salk Institute, La Jolla, California 92037. HD-07343 (NICHD) HD-13527 (NICHD) JOURNAL OF BIOLOGICAL CHEMISTRY, (1993 Sep 5) 268 (25) 19013-8. Journal code: 2985121R. ISSN: 0021-9258. United States Journal; Article; (JOURNAL ARTICLE) English Priority Journals 199309 Entered STN: 19931015 Last Updated on STN: 19931015 Entered Medline: 19930930 ANSWER 6 OF 9 MEDLINE 93221518 MEDLINE 93221518 PubMed ID: 8385453 Molecular characterization of rat transforming growth factor-beta type II receptor. Tsuchida K; Lewis K A; Mathews L S; Vale W W Clayton Foundation Laboratories for Peptide Biology, Salk Institute, La Jolla, CA 92037. DK26741 (NIDDK) HD13527 (NICHD) BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1993 Mar 31) 191 (3) Journal code: 0372516. ISSN: 0006-291X. United States Journal; Article; (JOURNAL ARTICLE) English Priority Journals GENBANK-D25302; GENBANK-L09653; GENBANK-S64630; GENBANK-S64631; GENBANK-S64632; GENBANK-S64635; GENBANK-S64636; GENBANK-S64637; GENBANK-Z19150; GENBANK-Z19151 199305 Entered STN: 19930521 Last Updated on STN: 19950206 Entered Medline: 19930503 ANSWER 7 OF 9 MEDLINE 92231944 MEDLINE 92231944 PubMed ID: 1314589 Molecular cloning and binding properties of the human type II activin receptor. Donaldson C J; Mathews L S; Vale W W Clayton Foundation Laboratories for Peptide Biology, Salk Institute, La Jolla, CA 92037. DK-26741-11 (NIDDK) HD-07343-01 (NICHD) HD-13527-12 (NICHD) BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1992 Apr 15) 184 (1) 310-6.

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Journal code: 0372516. ISSN: 0006-291X.

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DT
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     Entered Medline: 19920520
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                       MEDLINE
L4
     92205349
                 MEDLINE
ΑN
DN
     92205349
                PubMed ID: 1313188
ΤI
     Cloning of a second type of activin receptor and functional
     characterization in Xenopus embryos.
ΑU
     Mathews L S; Vale W W; Kintner C R
     Clayton Foundation Laboratories for Peptide Biology, Salk Institute, La
CS
     Jolla, CA 92037.
     DK-26741 (NIDDK)
NC
     HD-07343 (NICHD)
     HD-13275 (NICHD)
     SCIENCE, (1992 Mar 27) 255 (5052) 1702-5.
SO
     Journal code: 0404511. ISSN: 0036-8075.
CY
     United States
     Journal; Article; (JOURNAL ARTICLE)
DT
LA
     English
FS
     Priority Journals
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     199204
     Entered STN: 19920509
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     Last Updated on STN: 19970203
     Entered Medline: 19920430
L4
     ANSWER 9 OF 9
                       MEDLINE
                 MEDLINE
AN
     91256317
                PubMed ID: 1646080
DN
     91256317
     Expression cloning of an activin receptor, a predicted transmembrane
ΤI
     serine kinase.
ΑU
     Mathews L S; Vale W W
     Clayton Foundation Laboratories for Peptide Biology, Salk Institute, La
CS
     Jolla, California 92037.
NC
     DK-26741-11 (NIDDK)
     HD-07343-01 (NICHD)
     HD-13527-12 (NICHD)
     CELL, (1991 Jun 14) 65 (6) 973-82.
SO
     Journal code: 0413066. ISSN: 0092-8674.
CY
     United States
     Journal; Article; (JOURNAL ARTICLE)
DT
LA
     English
FS
     Priority Journals
EM
     199107
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     Last Updated on STN: 19910802
     Entered Medline: 19910712
=> s activin receptor?
          2671 ACTIVIN
          1618 ACTIVINS
          2877 ACTIVIN
                 (ACTIVIN OR ACTIVINS)
        602374 RECEPTOR?
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L5
           689 ACTIVIN RECEPTOR?
                  (ACTIVIN(W) RECEPTOR?)
=> s inhibin receptor?
           3238 INHIBIN
           3474 INHIBINS
           4274 INHIBIN
                  (INHIBIN OR INHIBINS)
         602374 RECEPTOR?
L6
             44 INHIBIN RECEPTOR?
                  (INHIBIN(W) RECEPTOR?)
=> s TGF receptor?
         19612 TGF
156 TGFS
         19635 TGF
                  (TGF OR TGFS)
         602374 RECEPTOR?
L7
            16 TGF RECEPTOR?
                  (TGF(W) RECEPTOR?)
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L8
       6674220 ED>19910520
                  (ED>19910520)
 75% OF LIMIT FOR TOTAL ANSWERS REACHED
=> s L5 and L8
           687 L5 AND L8
L9
=> s binding assay?
        625631 BINDING
          1244 BINDINGS
        625904 BINDING
                  (BINDING OR BINDINGS)
        436520 ASSAY?
         14787 BINDING ASSAY?
L10
                  (BINDING(W)ASSAY?)
=> s L5 and L10
L11
             5 L5 AND L10
=> s L6 and L10
             1 L6 AND L10
L12
=> s L7 and L10
L13
             0 L7 AND L10
=> d L12
L12 ANSWER 1 OF 1
                       MEDLINE
     2002097512
                    MEDLINE
DN
                PubMed ID: 11818494
ΤI
     Inhibin binding protein (InhBP/p120), betaglycan, and the continuing
     search for the inhibin receptor.
ΑU
     Bernard Daniel J; Chapman Stacey C; Woodruff Teresa K
CS
     Department of Neurobiology and Physiology, Northwestern University,
     Evanston, Illinois 60208, USA.
NC
     HD-37096 (NICHD)
     T32-CA09560 (NCI)
SO
     MOLECULAR ENDOCRINOLOGY, (2002 Feb) 16 (2) 207-12. Ref: 41
     Journal code: 8801431. ISSN: 0888-8809.
CY
     United States
\mathsf{DT}
     Journal; Article; (JOURNAL ARTICLE)
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General Review; (REVIEW) (REVIEW, TUTORIAL) English Priority Journals 200204 Entered STN: 20020206 Last Updated on STN: 20020406 Entered Medline: 20020405 => d L11 1-5 ANSWER 1 OF 5 MEDLINE 2000029667 MEDLINE 20029667 PubMed ID: 10559140 Human activin-A is expressed in the atherosclerotic lesion and promotes the contractile phenotype of smooth muscle cells. Engelse M A; Neele J M; van Achterberg T A; van Aken B E; van Schaik R H; Pannekoek H; de Vries C J Academic Medical Center, University of Amsterdam, Department of Biochemistry, Amsterdam and Erasmus University, Department of Endocrinology and Reproduction, Rotterdam, The Netherlands. CIRCULATION RESEARCH, (1999 Nov 12) 85 (10) 931-9. Journal code: 0047103. ISSN: 1524-4571. United States Journal; Article; (JOURNAL ARTICLE) English Priority Journals 199912 Entered STN: 20000113 Last Updated on STN: 20010521 Entered Medline: 19991202 L11 ANSWER 2 OF 5 MEDLINE 1999060112 MEDLINE 99060112 PubMed ID: 9843440 Characterization of the extracellular ligand-binding domain of the type II activin receptor. Greenwald J; Le V; Corrigan A; Fischer W; Komives E; Vale W; Choe S Structural Biology Laboratory, The Salk Institute, La Jolla, California 92037, USA. HD13527 (NICHD) BIOCHEMISTRY, (1998 Nov 24) 37 (47) 16711-8. Journal code: 0370623. ISSN: 0006-2960. United States Journal; Article; (JOURNAL ARTICLE) English Priority Journals 199812 Entered STN: 19990115 Last Updated on STN: 19990115 Entered Medline: 19981231 L11 ANSWER 3 OF 5 MEDLINE 96069914 MEDLINE 96069914 PubMed ID: 7589799 Activin and its receptors during gastrulation and the later phases of mesoderm development in the chick embryo. Stern C D; Yu R T; Kakizuka A; Kintner C R; Mathews L S; Vale W W; Evans R M; Umesono K Department of Genetics and Development, College of Physicians and Surgeons

of Columbia University, New York, New York 10032, USA.

DEVELOPMENTAL BIOLOGY, (1995 Nov) 172 (1) 192-205.

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Journal code: 0372762. ISSN: 0012-1606. United States CYJournal; Article; (JOURNAL ARTICLE) DT LA English FS Priority Journals GENBANK-U31222; GENBANK-U31223 OS EM 199512 ED Entered STN: 19960124 Last Updated on STN: 19960124 Entered Medline: 19951226 L11 ANSWER 4 OF 5 MEDLINE 95361766 MEDLINE AN PubMed ID: 7635059 DN 95361766 Induction of dorsal mesoderm by soluble, mature Vg1 protein. ΤI ΑU Kessler D S; Melton D A Department of Molecular and Cellular Biology, Howard Hughes Medical CS Institute, Harvard University, Cambridge, MA 02138, USA. SO DEVELOPMENT, (1995 Jul) 121 (7) 2155-64. Journal code: 8701744. ISSN: 0950-1991. CY ENGLAND: United Kingdom Journal; Article; (JOURNAL ARTICLE) DTLA English FS Priority Journals EM199509 ED Entered STN: 19950921 Last Updated on STN: 19970203 Entered Medline: 19950911 L11 ANSWER 5 OF 5 MEDLINE ΑN 94252231 MEDLINE DN 94252231 PubMed ID: 8194459 ΤI Effect of activin on luteinizing hormone-human chorionic gonadotropin receptor messenger ribonucleic acid in granulosa cells. Nakamura K; Nakamura M; Igarashi S; Miyamoto K; Eto Y; Ibuki Y; Mineqishi ΑU CS Department of Obstetrics and Gynecology, Gunma University School of Medicine, Japan. ENDOCRINOLOGY, (1994 Jun) 134 (6) 2329-35. SO Journal code: 0375040. ISSN: 0013-7227. CY United States DT Journal; Article; (JOURNAL ARTICLE) English LA FS Abridged Index Medicus Journals; Priority Journals EΜ 199406 ED Entered STN: 19940707

Last Updated on STN: 19970203 Entered Medline: 19940628

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| 1 | 1 | 5885794.pn. | USPAT | 2003/06/23 09:31 |
| 2 | 1 | 6162896.pn. | USPAT | 2003/06/23 09:54 |
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| 5 | 1 | 6093549.pn. | USPAT | 2003/06/23 10:53 |
| 11 | 44 | | USPAT; | 2003/06/23 10:56 |
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| | | | EPO; | |
| | | | DERWENT | |
| 16 | 157 | activin adj1 receptor | USPAT; | 2003/06/23 11:00 |
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| 21 | 45 | activin adj1 receptor? | USPAT; | 2003/06/23 11:08 |
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| 31 | 6 | inhibin adj1 receptor? | USPAT; | 2003/06/23 11:06 |
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| 51 | 73 | serine adj1 kinase? | USPAT; | 2003/06/23 11:10 |
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| | ט | 1 | Document ID | Issue Date | Pages | Title | Current OR |
|---|---|---|-------------------------|---------------|-------|--|------------|
| 1 | ⊠ | | US 20010039036 A1 | 20011108 | 33 | Cloning and recombinant production of receptor(s) of the activin/TGF-beta superfamily | 435/69.1 |
| 2 | ☒ | | US 20010049360 A1 | 20011206 | | Betaglycan as an inhibin receptor and uses thereof | 514/44 |
| 3 | | | US 5885794 A | 19990323 | 28 | Recombinant production of vertebrate activin receptor polypeptides and identification of receptor DNAs in the activin/TGFbeta. superfamily | 435/69.1 |
| 4 | | | US 6162896 A | 20001219 | 33 | Recombinant vertebrate activin receptors | 530/350 |

| | Current XRef | Retrieval Classif | Inventor | s | С | P | 2 | 3 | 4 | 5 |
|---|---|----------------------|--------------------------------|---|---|---|---|---|---|---|
| 1 | 435/4; 530/350; 530/388.1 | | Mathews, Lawrence S. et al. | | | | | | | |
| 2 | 424/130.1 | | Vale, Wylie et al. | | | | | | | |
| 3 | 435/252.3; 435/254.11; 435/320.1; 435/325; 435/6; 536/23.5; 536/24.31 | | Mathews, Lawrence S. et al. | | | | | | | |
| 4 | 435/69.1; 530/395 | | Mathews, Lawrence W. et al. | ☒ | | | | | | |

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| 2 | | | |
| 3 | US | 5885794 | |
| 4 | US | 6162896 | |

| | σ | 1 | Document ID | Issue Date | Pages | Title | Current OR |
|----|---|-------|-------------------------|---------------|-------|--|------------|
| 1 | Ø | | EP 1132472 A1 | 20010912 | 61 | NOVEL PROTEIN AND UTILIZATION THEREOF | |
| 2 | ⊠ | | EP 771873 A2 | 19970507 | | Neuronal cell-specific receptor protein | |
| 3 | ⊠ | | US 20010039036 A1 | 20011108 | 33 | Cloning and recombinant production of receptor(s) of the activin/TGF-beta superfamily | 435/69.1 |
| 4 | ⊠ | | US 20010049360 A1 | 20011206 | | Betaglycan as an inhibin receptor and uses thereof | 514/44 |
| 5 | ⊠ | | US 20020137133 A1 | 20020926 | | Receptor proteins | 435/69.1 |
| 6 | ⊠ | | US 20020157126 A1 | 20021024 | | Use of follistatin to increase muscle mass | 800/18 |
| 7 | × | | US 20020160478 A1 | 20021031 | | Short peptides which selectively modulate the activity of protein kinases | 435/184 |
| 8 | × | | US 20020164647 A1 | 20021107 | | Protein-protein interactions | 435/7.1 |
| 9 | × | | US 20030060398 A1 | 20030327 | | Neuronal rescue agent | 514/2 |
| 10 | × | | US 20030082233 A1 | 20030501 | | Method and composition for modulating bone growth | 424/484 |
| 11 | ⊠ | | US 20030096296 A1 | 20030522 | | Use of a BMP protein receptor complex for screening bone metabolism actives and cells co-transfected with a type II BMP receptor and a type I BMP receptor | 435/7.1 |
| 12 | ⊠ | | US 20030103950 A1 | 20030605 | | Cell | 424/93.21 |
| 13 | Ø | | US 20030103959 A1 | 20030605 | | Methods of providing neuroprotection and/or neurorestoration via the neural activin type IIB receptor | 424/94.63 |
| 14 | ☒ | 1 1 1 | US 5216126 A | 19930601 | 32 | Receptor polypeptides and their production and uses | 530/350 |

| | Current XRef | Retrieval Classif | Inventor | s | С | P | 2 | 3 | 4 | 5 |
|----|---|----------------------|---------------------------------|---|---|---|---|---|---|---|
| 1 | | | SUGINO, HIROSHI | | | | | | | |
| 2 | | | SUGINO, HIROMU et al. | | | | | | | |
| 3 | 435/4; 530/350; 530/388.1 | | Mathews, Lawrence S. et al. | | | | | | | |
| 4 | 424/130.1 | | Vale, Wylie et al. | | | | | | | |
| 5 | 435/320.1; 435/325; 530/350; 536/23.5 | | Wozney, John M. et al. | | | | | | | |
| 6 | 530/350 | | Lee, Se-Jin et al. | | | | | | | |
| 7 | 530/317 | | Ben-Sasson, Shmuel A. | | | | | | | |
| 8 | | | Cimbora, Daniel M. et al. | | | | | | | |
| 9 | | | Gluckman, Peter David et al. | | | | | | | |
| 10 | 424/146.1 | | Lyons, Karen M. et al. | | | | | | | |
| 11 | 435/194; 435/320.1; 435/325; 435/69.1; 536/23.2 | | Rosenbaum, Jan Susan | | | | | | | |
| 12 | 435/366 | | Sharpe, Paul Thomas | | | | | | | |
| 13 | | | Hughes, Paul E. et al. | | | | | | | |
| 14 | 530/388.22 ; 530/389.1 | | Cox, Edward T. et al. | | | | | | | |

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| 1 | EP 1132472 A1 | |
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| 3 | US 20010039036 | |
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| 14 | US 5216126 | |

| | U | 1 | De | cument ID | Issue Date | Pages | Title | Current OR | |
|----|---|---|---------|-----------|---------------|-------|---|------------|--|
| 15 | | | US A | 5286654 | 19940215 | 33 | Detection and purification of activin polypeptide | 436/501 | |
| 16 | | | US A | 5453492 | 19950926 | 16 | 60 kDa transforming growth factorbetabinding protein and its use to detect or purify TGFbeta. | 530/413 | |
| 17 | ⊠ | | US A | 5545616 | 19960813 | 23 | Method for predicting and/or preventing preterm labor | 514/8 | |
| 18 | Ø | | US A | 5654404 | 19970805 | 29 | Protection against liver damage by HGF | 530/387.3 | |
| 19 | | | US A | 5658876 | 19970819 | 18 | Activin antagonists as novel contraceptives | 514/2 | |
| 20 | ⊠ | | US A | 5703048 | 19971230 | 26 | Protection against liver damage by HGF | 514/12 | |
| 21 | | | US A | 5766863 | 19980616 | | Kinase receptor activation assay | 435/7.21 | |
| 22 | | | US A | 5807713 | 19980915 | 30 | DNA encoding growth/differentiation factor | 435/69.5 | |

| | Current XRef | Retrieval Classif | Inventor | s | С | P | 2 | 3 | 4 | 5 |
|----|---|----------------------|-------------------------------|---|---|---|---|---|---|---|
| 15 | 436/536; 530/388.22 ; 530/395; 530/413 | | Cox, Edward T. et al. | | | | | | | |
| 16 | 435/7.1; 530/350; 530/395; 530/402 | | Butzow, Ralf et al. | Ø | | | | | | |
| 17 | 514/2 | | Woodruff, Teresa K. | | | | | | | |
| 18 | 424/134.1; 424/136.1; 424/178.1; 530/350 | | Roos, Filip et al. | | | | | | | |
| 19 | 514/12; 514/21; 514/841; 514/843 | | Crowley, William F. et al. | × | | | | | | |
| 20 | 435/360; 514/2; 514/838; 514/893; 514/894; 530/350; 530/399 | | Roos, Filip et al. | | | | | | | |
| 21 | 435/6; 435/69.1; 435/7.4; 435/7.94; 435/975; 436/501; 436/518; 436/531; 436/548; 530/388.22; 530/388.26; 530/389.6; 530/391.3 | | Godowski, Paul J. et al. | | | | | | | |
| 22 | 435/252.3; 435/320.1; 435/325; 435/419; 435/71.1; 536/23.1; 536/23.5 | | Hotten, Gertrud et al. | | | | | | | |

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| 15 | US | 5286654 | |
| 16 | US | 5453492 | |
| 17 | US | 5545616 | |
| 18 | US | 5654404 | |
| 19 | US | 5658876 | |
| 20 | US | 5703048 | |
| 21 | US | 5766863 | |
| 22 | US | 5807713 | |

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| 23 | | | US A | 5824637 | 19981020 | 18 | Activin antagonists as novel contraceptives | 514/2 |
| 24 | ⊠ | | US A | 5831050 | 19981103 | 31 | Morphogen cell surface receptor | 536/23.5 |
| 25 | | | US A | 5861479 | 19990119 | 31 | Morphogen cell surface receptor | 530/324 |
| 26 | ⊠ | | US A | 5885794 | 19990323 | 28 | Recombinant production of vertebrate activin receptor polypeptides and identification of receptor DNAs in the activin/TGFbeta. superfamily | 435/69.1 |
| 27 | | | US A | 5891650 | 19990406 | 112 | Kinase receptor activation assay | 435/7.21 |
| 28 | \boxtimes | | US A | 5914237 | 19990622 | | Kinase receptor activation assay | 435/7.21 |
| 29 | ⊠ | 1 1 1 | US A | 5981483 | 19991109 | 42 | Compositions comprising modulators of cytokines of the TGFbeta. superfamily | 514/12 |

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| 23 | 514/12; 514/13; 514/21; 514/841; 514/843 | | Crowley, William F. et al. | | | | | | | |
| 24 | 530/350; 530/395; 536/24.31; 536/24.33 | | Jin, Donald F. et al. | | | | | | | |
| 25 | 435/6; 435/7.23; 530/399; 536/23.5; 536/23.51; 536/24.33 | | Jin, Donald F. et al. | | | | | | | |
| 26 | 435/252.3; 435/254.11; 435/320.1; 435/325; 435/6; 536/23.5; 536/24.31 | | Mathews, Lawrence S. et al. | | | | | | | |
| 27 | 435/15; 435/7.4; 435/7.94; 436/501; 436/518; 436/531; 436/548; 530/388.22 | | Godowski, Paul J. et al. | | | | | | | |
| | 530/388.26 ; 530/389.6 | | | | | | | | | |
| 28 | 435/15; 435/7.4; 435/7.94; 436/501; 436/518; 436/531; 436/548; 530/388.22; 530/388.26; 530/389.6 | | Godowski, Paul J. et al. | | | | | | | |
| 29 | 514/2; 514/8; 514/885; 530/350 | | Dennis, James W. et al. | | | | | | | |

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| 23 | US 5824637 | |
| 24 | US 5831050 | |
| 25 | US 5861479 | |
| 26 | US 5885794 | |
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| 28 | US 5914237 | |
| 29 | US 5981483 | |

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| 30 | | | US A | 6004937 | 19991221 | 6 | Use of follistatin to modulate growth and differentiation factor 8 [GDF-8] and bone morphogenic protein 11 [BMP-11] | 514/21 |
| 31 | ⋈ | | US A | 6093547 | 20000725 | 31 | Morphogen cell surface receptor and screening for morphogen analogs | 435/7.1 |
| 32 | | | US A | 6132988 | 20001017 | 47 | DNA encoding a neuronal cell-specific receptor protein | 435/69.1 |
| 33 | | | US A | 6162896 | 20001219 | 33 | Recombinant vertebrate activin receptors | 530/350 |
| 34 | | | US B1 | 6171584 | 20010109 | | Method of treatment with growth/differentiation factors of the TGFbeta. family | 424/85.1 |
| 35 | ⊠ | | US B1 | 6210899 | 20010403 | 85 | Use of a BMP protein receptor complex for screening bone metabolism actives and cells co-transfected with a type II BMP receptor and type I BMP receptor | 435/7.1 |
| 36 | × | | US B1 | 6287784 | 20010911 | | Kinase receptor activation assay | 435/7.1 |

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| 30 | 435/252.3; 435/320.1; 435/325; 435/69.1; 435/69.4; 514/8; 530/350; 530/397; 530/399; 536/23.1; 536/23.51; 536/24.33 | | Wood, Clive R. et al. | | | | | | | |
| 31 | 435/7.2; 435/810; 435/975 | | Jin, Donald F. et al. | | | | | | | |
| 32 | 435/252.1; 435/320.1; 435/325; 536/23.1; 536/23.5 | | Sugino, Hiromu et al. | | | | | | | |
| 33 | 435/69.1; 530/395 | | Mathews, Lawrence W. et al. | Ø | | | | | | |
| 34 | 435/252.3; 435/320.1; 435/325; 435/471; 435/69.5; 435/71.1; 514/12; 514/2; 514/8; 514/885; 536/23.1; 536/23.5; 536/24.1; 536/24.31 | | Hotten, Gertrud et al. | | | | | | | |
| 35 | 435/7.2; 435/7.93; 436/501; 530/350 | | Rosenbaum, Jan Susan | | | | | | | |
| 36 | 435/15; 435/194; 435/325; 435/69.1; 435/7.2 | | Godowski, Paul J. et al. | | | | | | | |

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| 30 | US 6004937 | |
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| 32 | US 6132988 | |
| 33 | US 6162896 | |
| 34 | US 6171584 | |
| 35 | US 6210899 | |
| 36 | US 6287784 | |

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| 37 | | | US 6291206 B1 | 20010918 | 38 | BMP receptor proteins | 435/69.1 |
| 38 | ⊠ | | US 6294335 B1 | 20010925 | 11 | Method of diagnosing abnormal cell growth | 435/6 |
| 39 | ⊠ | | US 6306622 B1 | 20011023 | 61 | cDNA encoding a BMP type II receptor | 435/69.1 |
| 40 | ⊠ | | US 6407060 B1 | 20020618 | 41 | Method for enhancing functional recovery following central nervous system ischemia or trauma | 514/12 |
| 41 | ⊠ | | US 6455262 B1 | 20020924 | 31 | Receptor polypeptides and their production and uses | 435/7.1 |
| 42 | | | WO 200131004 A | 20030520 | | New brain protein with affinity to activin receptors for treatment and prevention of brain and nerve disorders, such as Alzheimer's disease, Parkinson's disease and Huntington's disease | |
| 43 | ⊠ | | WO 2003006057 A | 20030123 | NA | Treatment and/or prophylaxis of a disease associated with fibrosis such as ulcerative colitis, Crohn's Disease, liver fibrosis or cirrhosis, in a vertebrate, comprises using an activin antagonist | |

| | XRef | Retrieval Classif | Inventor | s | С | P | 2 | 3 | 4 | 5 |
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| 37 | 435/252.3; 435/254.11; 435/320.1; 435/325; 536/23.1; 536/23.5; 536/23.51 | | Wozney, John M. et al. | | | | | | | |
| 38 | 435/252.3; 435/254.11; 435/320.1; 435/325; 435/69.1; 536/23.1; 536/23.5 | | Risbridger, Gail Petuna et al. | | | | | | | |
| 39 | 435/320.1; 435/325; 435/365; 530/350; 536/23.1; 536/23.5 | | Rosenbaum, Jan Susan et al. | | | | | | | |
| 40 | 514/21; 530/324; 530/350 | | Charette, Marc F. et al. | | | | | | | |
| 41 | 435/7.2; 436/501 | | Cox, Edward T. et al. | | | | | | | |
| 42 | | | SUGINO, H | | | | | | | |
| 43 | | | DE KRESTER, D et al. | | | | | | | |

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| 37 | US 6291206 | |
| 38 | US 6294335 | |
| 39 | US 6306622 | |
| 40 | US 6407060 | |
| 41 | US 6455262 | |
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|----|---|---|------------------|---------------|-------|---|---------|----|
| 44 | | | WO 9507982 A1 | 19950323 | 83 | ACTIVIN RECEPTORS-LIKE KINASE (ALK), BELONGING TO THE TGF RECEPTOR FAMILY AND/OR TO THE BMP RECEPTOR FAMILY | | |
| 45 | | | WO 9611259 A1 | 19960418 | - N | TGF- beta 1, ACTIVIN RECEPTORS 1 AND 3 | | |